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ABSTRACT

This report provides information about the level and program in which Connecticut's colleges and universities granted degrees in 1999-2000 and information about the gender and race or ethnicity of the recipients. The report also provides data by academic disciplines following the national Classification of Instructional Programs. Connecticut colleges and universities awarded 29,757 degrees and certificates in 1999-2000, a number that was nearly stable when compared to the previous year. The reflects enrollment trends. Minorities earned more degrees in 1999-2000 than in any other year. The 4,464 degrees and certificates earned by minorities represent an increase of 4.1% from 1998-1999 and 15.0% of all degrees and certificates awarded. The number of awards in several scientific and technical disciplines tied closely with Connecticut's economy continued to be of concern, as the number of bachelor's degrees in computer science continued to fall short of the identified demand. The number of degrees and certificates in the health professions fell, and awards in engineering and engineering related technologies remained stable, far below workforce demand. Public colleges and universities granted 2.4% fewer degrees, and independent institutions granted 15,296 degrees and certificates, up 2.8% from the previous year. There was a small increase in the number of bachelor's degrees awarded, with a small decrease in mater's degrees, and an increase in total doctoral and first professional degrees. The most popular disciplines in which degrees and certificates were awarded continued to be business management and administrative sciences, education, health professions and related sciences, social sciences and history, and liberal/general studies and humanities. Four appendixes contain detailed information on degree recipients, including information on race and ethnicity. (Contains 9 tables.) (SLD)

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Report

March 2001

Board of Governors for Higher Education
Department of Higher Education
State of Connecticut

ED 457 776

Degrees Conferred by Connecticut Institutions Of Higher Education 1999-2000

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Report

March 2001

Board of Governors for Higher Education
Department of Higher Education
State of Connecticut

Degrees Conferred by Connecticut Institutions
Of Higher Education
1999-2000
Highlights

- Connecticut colleges and universities awarded 29,757 degrees and certificates in 1999-2000. The number remained nearly stable compared to a year ago, with an increase of just 60 degrees and certificates (0.2%). Generally this reflects enrollment trends which began to rebound just three years ago.

- Once again, minorities earned more degrees in 1999-2000 than in any previous year. The 4,464 degrees and certificates earned by minorities represent an increase of 4.1% from 1998-99, and 15.0% of all degrees and certificates awarded.

- The number of awards in several scientific and technical disciplines tied closely with Connecticut's economy continue to be of concern:

  - While computer science awards at all levels increased – 181 more awards – due mostly to more undergraduate certificates granted in this field, the number of bachelor's degrees in this discipline still fall far short of the identified demand, perhaps by as much as 1,200 annually.

  - The total number of degrees and certificates in health professions fell by 320 (down 10%), due primarily to drops in the number of degrees in nursing and other therapeutic professional and paraprofessional fields. These decreases are of special concern for Connecticut's workforce, where nursing shortages alone indicate a need for approximately 947 additional registered nurses annually. Connecticut's colleges and universities granted a total of 614 associate's and bachelor's degrees in nursing this year, a decrease of 123 (16.7%) from last year.

  - Total awards in engineering and engineering-related technologies remained virtually stable, with just three more graduates in these disciplines compared to last year. Studies of Connecticut's workforce demand, however, show that occupational openings for engineers with bachelor's degrees far outstrips the supply, with an estimated 1,152 annual job openings for engineers compared with just 425 students earning bachelor's degrees in 1999-2000.

- Public colleges and universities granted 14,461 degrees and certificates, down 2.4% from the previous year. Independent institutions granted 15,296 degrees and certificates, up 2.8% over last year. By degree level, the changes included:

  - The number of undergraduate certificates increased by 14.1% (an increase of 155) from a year ago, with a large share (40.1%) granted by Gibbs College and Goodwin College. Certificates from public institutions dropped by 35 (down 5.1%) while certificates from independent institutions increased by 190 (45.6%). For many recipients, a certificate represents a step

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toward career entry or a career change. Two-thirds of all certificates were granted in just three disciplines: business, health professions or computer science.

- The number of associate's degrees dropped by 269, or 5.8%, including a 9.3% drop (down 345) from public institutions, while the number from independent institutions increased by 76 (8.0%).

- There was a small increase in the number of bachelor's degrees (up by 103 or 0.7%). Most of the increase (94 or 1.4% more) was in degrees from public institutions; independent institutions granted a total of 9 more bachelor's degrees this year compared to 1998-99, a one-year increase of 0.1%.

- The small drop in total master's degrees (down by 73 or 0.9%) was led by the decline of 5.4% (down 163) from public institutions. The number of master's degrees from independent institutions increased by 1.8% with 90 more degrees granted in 1999-2000 compared to the previous year.

- There was an increase in total doctorates and first-professional degrees, with the larger increase occurring in first-professional degrees. Total first-professional degrees increased by 106 or 12.5%, while the number of doctorates increased by 38 (6.0%). Doctorates from the University of Connecticut increased by 48 (21.1%), and first-professional degrees increased by 43 (14.5%). Doctorates from independent institutions fell by 10 (down 2.5%), and first-professional degrees increased by 63 (11.5%).

- The most popular disciplines in which degrees and certificates were awarded continue to be: business management and administrative services (5,740), education (3,114), health professions and related sciences (2,889), social sciences and history (2,776), and liberal/general studies and humanities (2,326).

Introduction

This report provides information about the level and program in which Connecticut's colleges and universities granted degrees in 1999-2000, and information about the gender and race or ethnicity of the recipients. The report also provides data by academic disciplines following the national Classification of Instructional Programs (CIP). More detail about the degrees can be obtained on the Department's web site (www.ctdhe.org).

Overview

Connecticut colleges and universities awarded 29,757 degrees and certificates in 1999-2000, an increase of just 60 (0.2%) over the previous year. Given that total headcount enrollment has only begun to increase in the last three years, this very small increase in number of degrees awarded is to be expected.

Table 1 provides the breakdown of degrees and certificates conferred by public and independent institutions over the past 11 years. In 1999-2000, public colleges and universities awarded nearly 49% of all degrees and certificates. The proportion of degrees and certificates granted by the public institutions has been dropping since 1993-94, reflecting state enrollment patterns in which public institutions' headcount enrollment has fluctuated more than total headcount at the independent institutions.

Table 1
Total Degrees and Certificates Granted by Connecticut Colleges and Universities
1989-90 to 1999-2000

	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00
Public Institutions											
Certificates <1 Yr	182	118	215	263	326	441	510	499	532	585	623
Certificates >1 Yr	185	246	235	215	279	274	241	252	190	96	23
Associate's	3,626	3,659	3,998	4,164	4,256	4,009	3,915	3,885	3,547	3,700	3,355
Bachelor's	7,254	7,706	8,116	8,229	7,502	7,554	7,201	7,031	6,896	6,881	6,975
Master's	2,604	2,549	2,749	2,700	2,764	2,653	2,773	2,979	2,937	3,034	2,871
Doctoral	217	228	206	216	246	265	239	254	253	227	275
First-Professional	313	336	321	282	302	310	312	324	307	296	339
TOTAL	**14,381**	**14,842**	**15,840**	**16,069**	**15,675**	**15,506**	**15,191**	**15,224**	**14,662**	**14,819**	**14,461**
Independent Institutions											
Certificates <1 Yr	21	38	44	64	24	41	34	43	33	399	174
Certificates >1 Yr	19	21	16	28	47	29	38	30	17	18	433
Associate's	1,116	1,201	1,052	1,034	915	807	874	957	953	954	1,030
Bachelor's	7,081	7,130	7,094	6,920	6,650	6,604	6,613	6,915	7,206	7,566	7,575
Master's	4,334	4,431	4,548	4,547	4,542	4,500	4,828	4,646	4,633	4,990	5,080
Doctoral	355	382	398	414	400	442	437	413	433	402	392
First-Professional	643	644	575	601	542	610	609	631	577	549	612
TOTAL	**13,569**	**13,847**	**13,727**	**13,608**	**13,120**	**13,033**	**13,433**	**13,635**	**13,852**	**14,878**	**15,296**
All Institutions											
Certificates <1 Yr	203	156	259	327	350	482	544	542	565	984	798
Certificates >1 Yr	204	267	251	243	326	303	279	282	207	114	456
Associate's	4,742	4,860	5,050	5,198	5,171	4,816	4,789	4,842	4,500	4,654	4,385
Bachelor's	14,335	14,836	15,210	15,149	14,152	14,158	13,814	13,946	14,102	14,447	14,550
Master's	6,938	6,980	7,297	7,247	7,306	7,153	7,601	7,625	7,570	8,024	7,951
Doctoral	572	610	604	630	646	707	676	667	686	629	667
First-Professional	956	980	896	883	844	920	921	955	884	845	951
GRAND TOTAL	**27,950**	**28,689**	**29,567**	**29,677**	**28,795**	**28,539**	**28,624**	**28,859**	**28,514**	**29,697**	**29,757**

As a proportion of total degrees and certificates granted, awards at the bachelor's level represent slightly less than half, (48.9%) a proportion that has remained fairly constant over the past decade. The second highest proportion of awards are master's degrees with 26.7% of total awards, down somewhat from a year ago, but still higher than in previous years in the decade. Associate's degrees represent 14.7% of total awards, and continue a general downward trend in both number and percentage of the total.

Undergraduate certificates, while representing just 4.2% of total awards, have grown both because of increases in reporting (reporting has been consistent since 1993-94) and more people earning credentials at this level. Just two institutions, Gibbs College and Goodwin College, granted 40.1% of these certificates in 1999-2000, and most of these certificates were at the one-year certificate level. Goodwin College was licensed to offer degrees in 1999 and began reporting its degrees and certificates as of 1998-99. Two-thirds of all undergraduate certificates (both one-year and less-than-one-year) were granted in just three disciplines: business, health professions, and computer science. While we have little data about the individual recipients of these certificates, it is likely they include many who are seeking focused job-specific preparation, either for a career change or for career-entry.

Table 2 depicts percentages of degrees and certificates at each level for the past four years plus the peak year of 1992-93.

Table 2
Percentage of Degrees and Certificates by Level
From Connecticut Colleges and Universities
Selected Years
1992-93 to 1999-00

	1992-93	1994-95	1996-97	1998-99	1999-00
All Certificates	1.9%	2.8%	2.9%	3.7%	4.2%
Associate's	17.5%	16.9%	16.8%	15.7%	14.7%
Bachelor's	51.0%	49.6%	48.3%	48.6%	48.9%
Master's	24.4%	25.1%	26.4%	27.0%	26.7%
Doctoral	2.1%	2.5%	2.3%	2.1%	2.2%
First-Professional	3.0%	3.2%	3.3%	2.8%	3.2%

Degrees Awarded to Minorities

Each year minority individuals earn more and more degrees and certificates in Connecticut, and 1999-2000 was no exception. Minorities earned 4,464 degrees or certificates in 1999-2000, up 4.1% from 1998-99, as shown in Table 3. In addition, degrees conferred to minority students made up a higher proportion (15.0%) of the total than in years past. For nearly two decades, minority students have made significant progress by earning more and more degrees. Despite this growth, the percentage of degrees and certificates earned by minorities – at 15.0% – still lags behind the overall enrollment rate which is 18.4% of total fall 2000 headcount.

Table 3
Degrees Awarded by Race and Ethnicity
By Connecticut Colleges and Universities
Selected Years
1984-1985 to 1999-00

Race/Ethnicity	1984-85 **	1990-91 **	1998-99	1999-00
African American	849	1,111	1,714	1,835
Hispanic/Latino	455	623	1,226	1,312
Asian American	504	680	1,257	1,217
American Indian	59	48	91	100
TOTAL, Minorities	1,867	2,462	4,288	4,464
White	24,358	23,740	22,346	22,251
Non-Resident Aliens	791	1,346	1,802	1,782
TOTAL, Non-Minorities	25,149	25,086	24,148	24,034
GRAND TOTAL	27,016	28,533*	29,697*	29,757*
Minority Degrees as % of Total Degrees	6.9%	8.6%	14.4%	15.0%

* Included in GRAND TOTAL are students for whom race/ethnicity was not identified.

** Data for these years do not include Certificates-of-Less-Than-One-Year duration.

Total degrees and certificates awarded to persons from each ethnic group changed at different rates. Degrees conferred to African Americans were up 7.1%, to Hispanics up 7.0%, and to American Indians up 9.9% from 1998-99 to 1999-2000. Among minority groups, only Asian Americans received fewer degrees or certificates, dropping 3.2% from last year; this is the first decline in total awards for Asian Americans since 1994-95. Of the total degrees and certificates awarded in 1999-2000, African Americans earned 6.1%, Hispanics 4.4%, Asian Americans 4.1%, and American Indians 0.3%.

Independent institutions granted more degrees and certificates to minority students (53.6%) than did the publics (46.4%). Table 4 provides the break out of degrees and certificates by gender, race or ethnicity, and type of institution.

The distribution of degrees and certificates earned by minorities varies considerably by level and by minority group. Overall, minorities continue to trail whites in proportions of master's and doctoral degrees and to earn a significantly higher proportion of their degrees at the associate's and undergraduate certificate levels. This year there was a small increase in undergraduate certificates, associate's degrees and master's degrees to minorities. The percentage of degrees and certificates at the bachelor's level remained essentially the same, while their percentage of doctorates and first-professional degrees decreased a bit though they are still about the same proportion as in the early 1980s (see Table 5).

Non-resident aliens or foreign students earned 1,782 degrees and certificates in 1999-2000 with independent colleges and universities awarding the most.

Table 4
Total Degrees Awarded by Sector, Gender, and Race/Ethnicity
Connecticut Colleges and Universities
1999-2000

Summary Totals	Black Non-Hispanic		Hispanic		Asian or Pacific Islander		American Indian or Alaska Native		White Non-Hispanic		Non-Resident Alien		Other Race/Ethnicity		Total	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
PUBLIC INSTITUTIONS																
University of Connecticut	94	113	70	98	95	107	7	7	1,642	2,080	140	107	25	23	2,073	2,535
Connecticut State University	122	193	64	129	41	73	9	6	1,492	2,880	35	36	123	187	1,886	3,504
Community-Technical Colleges	112	248	103	170	42	69	6	10	1,125	1,778	19	64	57	102	1,464	2,441
Charter Oak State College	12	13	15	4	3	2	2	2	139	138	1	-	22	16	194	175
TOTAL STATE INSTITUTIONS	340	567	252	401	181	251	24	25	4,398	6,877	195	207	227	328	5,617	8,655
U. S. Coast Guard Academy	1	2	5	3	7	7	2	2	109	46	2	3	-	-	126	63
TOTAL PUBLIC INSTITUTIONS	341	569	257	404	188	258	26	27	4,507	6,923	197	210	227	328	5,743	8,718
INDEPENDENT INSTITUTIONS																
National Independents	102	160	125	127	236	298	12	7	1,609	1,641	380	236	165	153	2,629	2,622
Regional Independents	178	346	102	178	117	103	10	17	2,924	4,189	384	288	194	178	3,909	5,299
Two-Year Independents	38	101	41	78	6	11	-	1	132	327	40	47	3	12	260	577
TOTAL INDEPENDENT INSTITUTIONS	318	607	268	383	359	412	22	25	4,665	6,157	804	571	362	343	6,798	8,498
TOTAL ALL INSTITUTIONS	659	1,176	525	787	547	670	48	52	9,172	13,080	1,001	781	589	671	12,541	17,216

Table 5
Percentage of Degrees Awarded to White and Minority Students
At Each Degree Level (Excluding Certificates of Less Than One Year)
By Connecticut Colleges and Universities in Selected Years from 1982-83 to 1999-2000

	1982-83		1997-98		1998-99		1999-2000	
	White	Minority	White	Minority	White	Minority	White	Minority
Certificate & Associate's	23.0%	28.5%	17.2%	21.0%	16.3%	21.3%	15.8%	24.3%
Bachelor's	50.4%	46.3%	51.7%	52.1%	51.8%	52.0%	52.8%	51.3%
Master's	21.7%	19.7%	26.0%	20.5%	27.2%	21.1%	26.4%	19.0%
Doctoral	1.6%	1.1%	1.8%	1.7%	1.7%	1.5%	1.8%	1.2%
First-Professional	3.3%	4.4%	3.2%	4.7%	2.9%	4.2%	3.1%	4.3%
	100%	100%	100%	100%	100%	100%	100.0%	100.0%

* Data for all years excludes Certificates of Less Than One Year

Degrees Earned by Women

Women received 57.9% of all degrees awarded in 1999-2000, almost the same as the year before. Women represent 56.6% of the total headcount enrollment (53.6% of full-time headcount) in Connecticut, thus their proportion of degrees and certificates is slightly higher than their enrollment proportion. There is, however, some difference in distribution by level, as women continue to be especially underrepresented among doctoral and first-professional degree recipients, though there has been a significant upturn in the proportion of women doctoral recipients this year. Most of the increase occurred in biological sciences (57 doctorates granted to women, an increase of 18 in one year), education (43 doctorates granted to women, an increase of 15), and psychology (42 doctorates granted to women, an increase of 21). A summary is shown in Table 6.

Table 6
Proportion of Degrees Conferred to Women by Level
Connecticut Colleges and Universities
Selected Years
1979-80 to 1999-2000

	Certificates Less Than One Year	Certificates One Year or More	Associate's	Bachelor's	Master's	Doctoral	First Professional	Total
1979-80	--	61.6%	59.8%	50.1%	52.4%	29.6%	27.3%	51.6%
1984-85	--	61.3%	56.3%	51.8%	51.1%	37.1%	36.2%	52.0%
1989-90	--	59.3%	62.0%	53.9%	56.6%	37.8%	41.3%	55.2%
1994-95	68.5%	77.9%	64.8%	55.3%	57.3%	43.0%	43.2%	57.2%
1995-96	65.8%	76.7%	66.6%	55.2%	57.6%	40.8%	40.8%	57.3%
1996-97	64.6%	76.2%	65.2%	55.4%	58.2%	40.2%	43.4%	57.4%
1997-98	65.1%	76.3%	65.3%	55.6%	60.0%	41.8%	43.6%	57.9%
1998-99	70.0%	65.8%	63.4%	55.9%	58.7%	40.9%	44.6%	57.7%
1999-00	60.2%	62.1%	63.1%	56.3%	59.5%	48.0%	46.5%	57.9%

Trends in Disciplines

For many years there has been a high level of consistency in the five disciplines with the highest number of degrees and certificates awarded. For 1999-2000, business management and administrative services was the field with the most degrees and certificates for the 18th consecutive year. Following this discipline, in descending order of number of awards at all levels, were education, health professions and related sciences, social sciences and history, and liberal arts and sciences, general studies and humanities. Education is again in the second spot, having fallen behind health professions and related sciences last year in total number of degrees and certificates. This reverts back to the situation which existed for most of the 1990s, when total degrees and certificates in health professions were the second highest and the number in education ranked third highest. Of these five disciplines, changes in total awards are as follows: business is up by 63; education is down by 56; health is down by 320; social sciences is up by 64; and liberal arts is down by 101.

Within the scientific and technical disciplines are several with greater numbers of awards at all levels, and several more with fewer numbers of awards. A large increase occurred in computer and information sciences for the second year in a row. As with last year most of the increase occurred at the certificate level, primarily one-year certificates, although awards at higher degree levels increased as well in this discipline. The total number of degrees and certificates in engineering and engineering-related

technologies remained stable, though there were increases at the bachelor's and less-than-one-year certificate levels, and decreases or little change at other levels.

The number of degrees and certificates in health professions and related sciences decreased, particularly at the associate's and bachelor's levels. A sizeable portion of the drop is attributable to declines in four sub-disciplines: nursing (down 15.6% from a year ago), mental health services (down 24.3%), rehabilitation/therapeutic services (down 14.1%), and pharmacy (down 47.6%). The latter, pharmacy, underwent a change from a baccalaureate level to doctoral level program this year, thus reducing the number of graduates for the year. Other fields, including nursing, have had shortages of personnel identified recently and bear watching.

Total numbers of degrees in the biological sciences are down slightly from a year ago, though still higher than in recent years. Mathematics degrees remain a small proportion of total awards despite having increased slightly again this year, mostly at the bachelor's level. Finally, the total number of awards in physical sciences and science technologies decreased, with the change driven by drops at the doctoral level. Table 7 provides totals and trend data for these disciplines, and Appendix 2 provides further detail regarding degree levels.

Table 7
Degrees Awarded in Scientific and Technical Disciplines
From Connecticut Colleges and Universities
Selected Years
1988-89 to 1999-2000

	1988-1989	1994-1995	1997-1998	1998-1999	1999-2000
Computer & Information Sciences					
Number of Degrees	577	355	258	534	715
Percentage of Total	2.1%	1.2%	1.3%	1.8%	2.4%
Engineering & Related Technologies					
Number of Degrees	1,933	1,490	1,310	1,269	1,272
Percentage of Total	7.2%	5.2%	4.6%	4.3%	4.3%
Health Professions & Related Sciences					
Number of Degrees	1,881	3,068	3,074	3,209	2,889
Percentage of Total	7.0%	10.8%	10.8%	10.8%	9.7%
Biological Sciences/Life Sciences					
Number of Degrees	721	1,024	1,025	1,077	1,050
Percentage of Total	2.7%	3.6%	3.6%	3.6%	3.5%
Mathematics					
Number of Degrees	292	328	244	260	293
Percentage of Total	1.1%	1.1%	0.9%	0.9%	1.0%
Physical Sciences & Science Technologies					
Number of Degrees	442	505	482	442	434
Percentage of Total	1.6%	1.8%	1.7%	1.5%	1.5%

Bachelor's Degrees in Key Disciplines

An important focus is bachelor's degrees, particularly in fields related to Connecticut's economic development clusters and workforce needs. The bachelor's degree often represents the major career entry-level credential and is also the single-largest degree or certificate level in Connecticut. Further, there is evidence of strong demand for people educated at the bachelor's level.

According to the Connecticut Department of Labor (DOL), employment requiring a bachelor's degree is expected to increase in the coming years, based on estimates for the period from 1998 to 2008[1]. Fields requiring a bachelor's degree that are the fastest growing or need the greatest number of new workers include systems analysts, teachers and engineers. While it is difficult – perhaps even impossible – to precisely match production of bachelor's degrees with specific employment opportunities, it is important to review trends in disciplines that are closely aligned with key job areas in Connecticut. Table 8 shows the degree trends in these key disciplines in Connecticut.

Table 8
Bachelor's Degrees Granted by Connecticut Colleges and Universities
Occupationally-Critical Workforce Disciplines
1988-89 through 1999-2000

Discipline	88-89	89-90	90-91	91-92	92-93	93-94	94-95	95-96	96-97	97-98	98-99	99-00
Engineering	753	744	730	746	665	634	522	478	448	431	399	425
Engineering-Related Technologies	176	190	180	218	206	186	166	146	147	164	161	173
Computer and Information Sciences	305	280	238	212	188	179	194	193	188	203	194	226
Biological Sciences/Life Sciences	491	497	505	568	637	689	762	774	736	771	777	727
Mathematics	213	196	228	239	227	222	243	166	171	173	168	194
Physical Sciences	190	185	188	237	278	277	321	225	299	277	236	246
Business Mgt & Admin Services	3,069	3,127	3,062	2,958	2,864	2,470	2,334	2,174	2,184	2,094	2,227	2,246
Marketing Operations	219	190	203	168	154	109	117	92	94	111	129	143

Engineering and Related Areas

Engineers of all types and technicians in engineering-related technologies are identified in DOL reports as "in demand" in Connecticut. DOL statistics estimate 1,152 annual openings for engineers in Connecticut, yet Connecticut colleges and universities granted only 425 bachelor's degrees in engineering in 1999-2000, about one-third of the anticipated occupational demand. Of great concern is the downward trend in the last dozen years during which engineering bachelor's degrees have declined by more than 300 from 1988-89 to 1999-2000, going from 753 to 425.

[1] Connecticut Department of Labor, Office of Research. 2001. Occupational Employment Projections, 1998-2008.

Specific fields and their anticipated annual openings include computer engineers (367 annual openings), electrical and electronics engineers (218 annual openings), mechanical engineers (195 annual openings), civil engineers (82 annual openings), industrial engineers (46 annual openings) and aerospace engineers (53 annual openings).

Computer and Information Sciences

Systems analysts and computer scientists/programmers also have been identified by DOL as in increasing demand in Connecticut, with more than 1,400 annual openings estimated for bachelor's-educated personnel. Specific occupations and their estimated annual openings include systems analysts (781 estimated annual openings), computer programmers (418 estimated annual openings), database administrators (83 annual openings), and other computer scientists (141 annual openings). While not all individuals who enter these professions major in computer and information sciences in college, tracking bachelor's degrees in this discipline is an indicator of the volume of people prepared to work in these occupations.

Since 1988-89, the number of bachelor's degrees in computer and information sciences granted in Connecticut decreased almost annually until this year when a slight upturn was posted. It is too early to tell if the increase is the start of a trend or is a one-year phenomenon. Total degrees, at 226, are clearly lower than the estimated demand of more than 1,400 in the occupations most closely aligned with degrees in this field.

The Natural Sciences

Several areas of work may draw people with bachelor's degrees in natural sciences disciplines. DOL data indicate that biological scientists, physicians, life sciences teachers, and the like will be in demand in the future. Most of these careers require preparation beyond the bachelor's degree, but a bachelor's in a related field often is the foundation for such graduate study. Also, these careers may draw from other disciplines, thus the linkage of annual openings in occupations and degrees granted may be less easily made.

The total number of bachelor's degrees from Connecticut colleges and universities in the natural sciences rose from 878 in 1988-89 to 1,167 in 1999-00. The peak occurred in 1994-95, with 1,326 bachelor's degrees. The biological sciences/life sciences discipline drives most of the change in the broad category, and physical sciences and mathematics were both more stable and far smaller in terms of total numbers.

Business Management and Administrative Services

Connecticut has an expressed need for accountants, underwriters, purchasing agents, and budget analysts, among other occupations associated with business management. Many who enter these professions have bachelor's degrees in business management and administrative services, or one of a related discipline that makes up this broad area including: 1) business management and administrative services, 2) marketing operations/marketing and distribution, and 3) personal and miscellaneous services. The number of bachelor's degrees in these fields in Connecticut increased by 33 (1.4%) since last year to a total of 2,389 in 1999-2000.

Nursing and Allied Health Professions

Noted earlier in this report is fewer degrees and certificates granted in nursing and allied health fields at all levels. This is of special concern, as the Department of Labor, for example, notes that there is an annual need for 947 registered nurses[2], and 99 annual openings for therapists such as occupational therapists with a bachelor's degree, and another 170 therapists such as physical therapists who are prepared at the master's level. Table 9 displays data for several of these areas from 1994-95 through the present.

Table 9
Undergraduate Degrees in Nursing and Therapeutic Occupations
From Connecticut Colleges and Universities
1994-95 through 1999-2000

Degree Discipline	94-95	95-96	96-97	97-98	98-99	99-00
Nursing (bachelor's)	505	472	473	448	449	364
Nursing (associate's)	359	386	384	294	288	250
Subtotal, undergraduate nursing	**864**	**858**	**857**	**742**	**737**	**614**
Occupational Therapy	88	85	125	110	138	134
Physical Therapy	131	119	150	192	230	123
Subtotal, bachelor's in therapeutic services	**219**	**204**	**275**	**302**	**368**	**257**

In 1999-2000, Connecticut colleges and universities granted just 364 bachelor's and 250 associate's degrees in nursing, a total of 614 undergraduate degrees in this vital discipline. The number of such degrees at both levels has fallen since 1994-95, when 864 such undergraduate degrees were granted in nursing.

The difference in degree-production for several of the therapeutic services fields is not as acute, and in fact there may be a bit of an over-supply. In 1999-2000, for example, Connecticut institutions granted 134 bachelor's degrees in occupational therapy, while the Department of Labor estimates about 32 annual openings.

Clearly there are a host of differences between supply and workforce needs in the entire health and medical arena, all of which bear close scrutiny and careful planning to address shortages.

Summary

This year, while the total number of awards remained much the same, a greater share of them went to minorities and to women, a sign of increasing diversity. This is part of a continuing trend, with more minority individuals receiving degrees in 1999-2000 than in previous years. Women and minorities however, remain significantly under-represented among degree recipients at post-baccalaureate levels.

[2] Department of Labor reports indicate the minimum education level for registered nurses is an associate's degree.

Specific disciplines of interest include several with strong linkages to the state's workforce needs. Among these are computer science, where total awards at all levels again jumped significantly this year largely because of 174 more one-year certificates, though the number of associate's, bachelor's and master's degrees climbed also. However, the number of bachelor's degrees in this discipline still falls far short of the identified need for bachelor's-prepared computer science workers in Connecticut. Degrees and certificates in several other workforce-related disciplines, including engineering and related technologies continued to drop, and also fall far short of workforce needs at the bachelor's level. Total degrees and certificates in the broad discipline health sciences (including nursing and other therapeutic services) also decreased, contributing to reported shortages in these fields. Comparisons with identified occupational demands for nurses shows a large gap between the number of degrees granted and the workforce needs. Other fields such as the natural sciences and business are also related to Connecticut's workforce needs. In contrast, the discipline with the largest number of degrees and certificates at all levels in Connecticut was business, continuing a lengthy trend.

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Appendix I

Degrees and Certificates Granted by Connecticut Colleges and Universities
1999-2000

	Certificates less than one year	Certificates one year or more	Associate's	Bachelor's	Master's	Doctoral	First Professional	Total
Public Institutions								
Storrs and Regional Campuses	-	-	18	2,802	1,174	275	209	4,478
UConn Health Center	-	-	-	-	-	-	130	130
University of Connecticut, Total	-	-	18	2,802	1,174	275	339	4,608
Central	0	0	0	1,311	415	0	0	1,726
Eastern	0	0	24	748	60	0	0	832
Southern	0	2	1	1,060	1,069	0	0	2,132
Western	0	0	5	542	153	0	0	700
Connecticut State University, Total	-	2	30	3,661	1,697	-	-	5,390
Asnuntuck	48	-	149	-	-	-	-	197
Capital	53	-	239	-	-	-	-	292
Gateway	80	-	313	-	-	-	-	393
Housatonic	36	1	249	-	-	-	-	286
Manchester	86	-	491	-	-	-	-	577
Middlesex	12	-	143	-	-	-	-	155
Naugatuck Valley	74	1	411	-	-	-	-	486
Northwestern Connecticut	62	1	146	-	-	-	-	209
Norwalk	10	4	376	-	-	-	-	390
Quinebaug Valley	27	2	98	-	-	-	-	127
Three Rivers	27	12	419	-	-	-	-	458
Tunxis	108	-	227	-	-	-	-	335
Community-Technical Colleges, Total	623	21	3,261	-	-	-	-	3,905
Charter Oak State College	-	-	46	323	-	-	-	369
TOTAL, State Institutions	623	23	3,355	6,786	2,871	275	339	14,272
U.S. Coast Guard Academy	-	-	-	189	-	-	-	189
TOTAL, Public Institutions	623	23	3,355	6,975	2,871	275	339	14,461
Independent Institutions								
Connecticut College	-	-	-	436	25	-	-	461
Trinity College	-	-	-	493	27	-	-	520
Wesleyan College	-	-	-	752	93	14	-	859
Yale University	-	-	-	1,356	1,363	334	358	3,411
National Independents	-	-	-	3,037	1,508	348	358	5,251
Albertus Magnus College	6	-	146	265	132	-	-	549
Fairfield University	-	-	22	811	241	-	-	1,074
Hartford Seminary	-	-	-	-	15	8	-	23
Holy Apostles College	-	-	-	9	6	-	9	24
Lyme Academy of Fine Arts	-	-	-	14	-	-	-	14
Mitchell College	-	-	157	12	-	-	-	169
Paier College of Art, Inc.	4	-	9	26	-	-	-	39
Quinnipiac University	-	-	3	777	181	-	202	1,163
Rensselaer at Hartford	-	-	-	-	591	-	-	591
Sacred Heart University	-	-	91	690	553	-	-	1,334
St. Basil College	-	-	-	4	-	-	-	4
St. Joseph College	-	-	-	201	158	-	-	359
Teikyo Post University	-	-	34	222	-	-	-	256
University of Bridgeport	-	-	48	152	487	2	43	732
University of Hartford	7	-	132	953	462	31	-	1,585
University of New Haven	74	-	67	402	746	3	-	1,292
Regional Independents	91	-	709	4,538	3,572	44	254	9,208
Briarwood College	-	7	137	-	-	-	-	144
Gibbs College	83	163	48	-	-	-	-	294
Goodwin College	-	257	3	-	-	-	-	260
Int'l College of Hospitality Management	-	6	87	-	-	-	-	93
St. Vincent's College	-	-	46	-	-	-	-	46
Two-Year Independent, Total	83	433	321	-	-	-	-	837
TOTAL, Independent Institutions	174	433	1,030	7,575	5,080	392	612	15,296
TOTAL, All Institutions	797	456	4,385	14,550	7,951	667	951	29,757

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Appendix 2
Degrees and Certificates Granted by Connecticut Colleges and Universities, by Discipline and Level
1999-2000

CIP	Discipline	Certificates Less Than One-Year	Certificates One Year or More	Associate's	Bachelor's	Master's	Doctoral	First Professional	Total	Rank
1	Agricultural Business and Production			19	8	4			31	33
2	Agricultural Sciences	3		7	56	7	4		77	31
3	Conservation and Renewable Natural Resources				65	108	13		186	26
4	Architecture and Related Programs	1			67	54			122	28
5	Area, Ethnic, and Cultural Studies				263	43	7		313	19
8	Marketing Operations/Marketing and Distribution	4		72	143				219	23
9	Communications	1		17	752	17			787	10
10	Communications Technologies	2		27					29	35
11	Computer and Information Sciences	14	174	54	226	244	3		715	13
12	Personal and Miscellaneous Services	2		33					35	32
13	Education			30	522	2,501	61		3,114	2
14	Engineering			31	425	224	48		728	12
15	Engineering-Related Technologies	95	1	267	173	8			544	15
16	Foreign Languages and Literatures				220	48	34		302	20
19	Home Economics, General				234	109	5		348	18
20	Vocational Home Economics	47		161					208	24
22	Law and Legal Studies	15		77	28	39	1	612	772	11
23	English Language and Literature/Letters				794	66	21		881	9
24	Liberal Arts and Sciences, General Studies and Humanit	2		1,452	867	4	1		2,326	5
25	Library Science		7		2	77			86	30
26	Biological Sciences/Life Sciences			6	727	201	116		1,050	8
27	Mathematics				194	76	23		293	21
30	Multi/Interdisciplinary Studies				251	10	1		262	22
31	Parks, Recreation, Leisure, and Fitness Studies	12		17	54	7			90	29
32	Basic Skills								-	
38	Philosophy and Religion				151	35	18		204	25
39	Theological Studies and Religious Vocations				2	61	8	59	130	27
40	Physical Sciences			10	246	92	61		409	17
41	Science Technologies			25					25	36
42	Psychology				1,239	255	67		1,561	6
43	Protective Services	135		213	250	81			679	14
44	Public Administration and Services	5		22	197	242			466	16
45	Social Sciences and History			7	2,398	276	95		2,776	4
47	Mechanics and Repairers	14	1	9					24	37
48	Precision Production Trades	14	1	16					31	34
49	Transportation and Materials Moving Workers			1	7				8	38
50	Visual and Performing Arts	19	37	97	825	287	32		1,297	7
51	Health Professions and Related Sciences	144	58	729	918	723	37	280	2,889	3
52	Business Management and Administrative Services	268	177	986	2,246	2,052	11		5,740	1
TOTAL		797	456	4,385	14,550	7,951	667	951	29,757	

Appendix 3

Degrees and Certificates by Level and Race/Ethnicity

1999-00

	Black Non-Hispanic	Hispanic	Asian or Pacific Islander	American Indian or Alaskan Native	White Non-Hispanic	Non-Resident Alien	Other	Total
Certificate < 1 Year								
Agricultural Sciences	0	0	0	0	3	0	0	3
Architecture and Related Programs	0	0	0	0	1	0	0	1
Business Management and Administrative Services	23	13	6	2	202	6	16	268
Communications	0	0	0	0	1	0	0	1
Communications Technologies	0	0	0	0	2	0	0	2
Computer and Information Sciences	1	0	2	0	9	0	2	14
Engineering-Related Technologies	3	4	4	0	77	1	6	95
Health Professions and Related Sciences	17	13	1	1	110	0	2	144
Law and Legal Studies	1	0	1	0	11	0	2	15
Liberal Arts and Sciences, General Studies and Huma	0	0	0	0	2	0	0	2
Marketing Operations/Marketing and Distribution	0	0	0	0	4	0	0	4
Mechanics and Repairers	0	1	1	0	10	0	2	14
Parks, Recreation, Leisure, and Fitness Studies	0	1	0	0	9	0	2	12
Personal and Miscellaneous Services	1	1	0	0	0	0	0	2
Precision Production Trades	0	1	1	0	10	0	2	14
Protective Services	13	8	0	0	106	0	8	135
Public Administration and Services	1	1	1	0	1	0	1	5
Visual and Performing Arts	0	0	0	1	17	1	0	19
Vocational Home Economics	19	1	0	0	23	2	2	47
Total Certificate < 1 Year Degrees	79	44	17	4	598	10	45	797
Certificate > 1 Year								
Business Management and Administrative Services	37	36	5	0	91	5	3	177
Computer and Information Sciences	40	34	4	0	92	0	4	174
Engineering-Related Technologies	0	1	0	0	0	0	0	1
Health Professions and Related Sciences	18	8	1	0	29	0	2	58
Library Science	0	0	1	0	4	0	2	7
Mechanics and Repairers	0	0	0	0	1	0	0	1
Precision Production Trades	0	0	0	0	1	0	0	1
Visual and Performing Arts	1	10	2	1	23	0	0	37
Total Certificate > 1 Year Degrees	96	89	13	1	241	5	11	456

Appendix 3 (Continued)
Degrees and Certificates by Level and Race/Ethnicity
1999-00

	Black Non-Hispanic	Hispanic	Asian or Pacific Islander	American Indian or Alaskan Native	White Non-Hispanic	Non-Resident Alien	Other	Total
Associate's								
Agricultural Business and Production	0	0	0	0	19	0	0	19
Agricultural Sciences	0	0	0	0	6	0	1	7
Biological Sciences/Life Sciences	0	1	0	0	5	0	0	6
Business Management and Administrative Services	128	54	37	4	626	113	24	986
Communications	1	0	0	0	9	0	7	17
Communications Technologies	2	0	0	0	23	0	2	27
Computer and Information Sciences	6	5	3	0	39	1	0	54
Education	1	3	0	0	24	1	1	30
Engineering	1	3	3	0	24	0	0	31
Engineering-Related Technologies	15	14	19	1	201	6	11	267
Health Professions and Related Sciences	71	46	12	3	555	19	23	729
Law and Legal Studies	6	2	0	0	62	0	7	77
Liberal Arts and Sciences, General Studies and Huma	140	113	20	9	1,063	45	62	1,452
Marketing Operations/Marketing and Distribution	6	3	1	0	59	1	2	72
Mechanics and Repairers	0	0	0	0	8	0	1	9
Parks, Recreation, Leisure, and Fitness Studies	3	1	0	0	13	0	0	17
Personal and Miscellaneous Services	3	4	0	0	25	0	1	33
Physical Sciences	0	0	0	0	10	0	0	10
Precision Production Trades	2	0	0	0	12	0	2	16
Protective Services	16	19	2	2	168	0	6	213
Public Administration and Services	6	4	1	0	9	2	0	22
Science Technologies	0	2	4	0	15	3	1	25
Social Sciences and History	0	0	0	0	7	0	0	7
Transportation and Materials Moving Workers	0	0	0	0	1	0	0	1
Visual and Performing Arts	2	9	3	1	79	1	2	97
Vocational Home Economics	18	12	3	2	120	1	5	161
Total Associate's Degrees	427	295	108	22	3,182	193	158	4,385

Appendix 3 (Continued)
Degrees and Certificates by Level and Race/Ethnicity
1999-00

	Black Non-Hispanic	Hispanic	Asian or Pacific Islander	American Indian or Alaskan Native	White Non-Hispanic	Non-Resident Alien	Other	Total
Bachelor's								
Agricultural Business and Production	0	0	0	0	8	0	0	8
Agricultural Sciences	0	1	0	0	55	0	0	56
Architecture and Related Programs	0	1	2	0	53	10	1	67
Area, Ethnic, and Cultural Studies	17	21	27	3	175	6	14	263
Biological Sciences/Life Sciences	37	25	87	3	535	20	20	727
Business Management and Administrative Services	150	86	103	2	1,744	101	60	2,246
Communications	44	27	15	0	629	17	20	752
Computer and Information Sciences	8	10	21	3	161	18	5	226
Conservation and Renewable Natural Resources	0	2	2	1	60	0	0	65
Education	14	20	12	0	459	3	14	522
Engineering	19	16	32	3	314	35	6	425
Engineering-Related Technologies	16	4	3	0	122	13	15	173
English Language and Literature/Letters	38	27	27	4	657	8	33	794
Foreign Languages and Literatures	15	29	11	1	144	11	9	220
Health Professions and Related Sciences	34	24	40	2	803	3	12	918
Home Economics, General	11	10	4	3	206	0	0	234
Law and Legal Studies	4	0	0	0	24	0	0	28
Liberal Arts and Sciences, General Studies and Huma	60	32	14	3	719	3	36	867
Library Science	0	0	1	0	1	0	0	2
Marketing Operations/Marketing and Distribution	4	4	3	0	129	2	1	143
Mathematics	7	7	13	3	155	4	5	194
Multi/Interdisciplinary Studies	23	18	23	0	166	15	6	251
Parks, Recreation, Leisure, and Fitness Studies	3	1	0	0	50	0	0	54
Philosophy and Religion	4	8	4	0	119	6	10	151
Physical Sciences	12	12	16	2	183	12	9	246
Protective Services	19	15	2	2	204	3	5	250
Psychology	79	59	35	1	1,010	22	33	1,239
Public Administration and Services	30	16	2	2	137	3	7	197
Social Sciences and History	197	109	140	11	1,734	103	104	2,398
Theological Studies and Religious Vocations	0	1	0	0	1	0	0	2
Transportation and Materials Moving Workers	1	0	1	0	3	2	0	7
Visual and Performing Arts	28	34	29	3	680	21	30	825
Total Bachelor's Degrees	874	619	669	52	11,440	441	455	14,550

Appendix 3 (Continued)
Degrees and Certificates by Level and Race/Ethnicity
1999-00

	Black Non-Hispanic	Hispanic	Asian or Pacific Islander	American Indian or Alaskan Native	White Non-Hispanic	Non-Resident Alien	Other	Total
Master's								
Agricultural Business and Production	0	0	0	0	2	2	0	4
Agricultural Sciences	0	0	0	0	6	1	0	-
Architecture and Related Programs	0	1	4	0	34	14	1	54
Area, Ethnic, and Cultural Studies	7	1	3	1	23	6	2	43
Biological Sciences/Life Sciences	3	15	15	0	128	26	14	201
Business Management and Administrative Services	103	32	122	4	1,294	300	197	2,052
Communications	0	10	0	0	6	1	0	17
Computer and Information Sciences	1	0	25	0	66	126	26	244
Conservation and Renewable Natural Resources	0	9	7	0	67	17	8	108
Education	85	47	15	2	2,201	44	107	2,501
Engineering	3	3	6	0	108	85	19	224
Engineering-Related Technologies	1	0	0	0	6	1	0	8
English Language and Literature/Letters	0	0	1	0	60	5	0	66
Foreign Languages and Literatures	0	8	1	0	16	19	4	48
Health Professions and Related Sciences	17	22	53	3	591	21	16	723
Home Economics, General	2	0	4	0	98	4	1	109
Law and Legal Studies	1	0	1	0	8	28	1	39
Liberal Arts and Sciences, General Studies and Huma	0	1	0	0	3	0	0	4
Library Science	0	0	2	0	71	0	4	77
Mathematics	1	1	2	0	32	33	7	76
Multi/Interdisciplinary Studies	0	0	2	0	6	1	1	10
Parks, Recreation, Leisure, and Fitness Studies	0	0	0	0	7	0	0	7
Philosophy and Religion	0	0	6	0	27	2	0	35
Physical Sciences	0	1	6	0	48	32	5	92
Protective Services	4	1	0	0	65	4	7	81
Psychology	8	11	3	0	208	15	10	255
Public Administration and Services	32	15	1	1	185	5	3	242
Social Sciences and History	13	15	7	1	143	76	21	276
Theological Studies and Religious Vocations	1	3	6	0	47	3	1	61
Visual and Performing Arts	12	9	14	2	165	75	10	287
Total Master's Degrees	294	205	306	14	5,721	946	465	7,951

Appendix 3 (Continued)
Degrees and Certificates by Level and Race/Ethnicity
1999-00

	Black Non-Hispanic	Hispanic	Asian or Pacific Islander	American Indian or Alaskan Native	White Non-Hispanic	Non-Resident Alien	Other	Total
Doctoral								
Agricultural Sciences	0	0	0	0	2	2	0	4
Area, Ethnic, and Cultural Studies	0	0	0	0	5	1	1	7
Biological Sciences/Life Sciences	2	2	8	0	69	26	9	116
Business Management and Administrative Services	1	0	0	0	5	4	1	11
Computer and Information Sciences	0	0	0	0	1	2	0	3
Conservation and Renewable Natural Resources	0	0	0	0	10	2	1	13
Education	3	5	0	0	51	2	0	61
Engineering	0	0	1	0	15	29	3	48
English Language and Literature/Letters	0	0	1	0	18	1	1	21
Foreign Languages and Literatures	1	1	2	0	17	8	5	34
Health Professions and Related Sciences	0	2	0	0	24	9	2	37
Home Economics, General	0	0	0	0	3	2	0	5
Law and Legal Studies	0	0	0	0	0	1	0	1
Liberal Arts and Sciences, General Studies and Huma	0	0	0	0	1	0	0	1
Mathematics	0	0	1	0	5	16	1	23
Multi/Interdisciplinary Studies	0	0	0	0	1	0	0	1
Philosophy and Religion	0	0	0	0	10	1	7	18
Physical Sciences	0	2	6	0	23	27	3	61
Psychology	1	3	1	1	51	6	4	67
Social Sciences and History	0	2	2	0	50	27	14	95
Theological Studies and Religious Vocations	1	0	0	0	7	0	0	8
Visual and Performing Arts	1	0	0	0	23	4	4	32
Total Doctoral Degrees	10	17	22	1	391	170	56	667
First-Professional								
Health Professions and Related Sciences	23	13	32	2	181	10	19	280
Law and Legal Studies	27	29	47	3	454	4	48	612
Theological Studies and Religious Vocations	5	1	3	1	43	3	3	59
Total First-Professional Degrees	55	43	82	6	678	17	70	951

Appendix 4
Degrees and Certificates by Level, Discipline and Gender of Recipient
1999-00

Discipline	Men	Women	Total
Certificate < 1 Year			
Agricultural Sciences	2	1	3
Architecture and Related Programs	0	1	1
Business Management and Administrative Services	55	213	268
Communications	0	1	1
Communications Technologies	0	2	2
Computer and Information Sciences	10	4	14
Engineering-Related Technologies	74	21	95
Health Professions and Related Sciences	23	121	144
Law and Legal Studies	1	14	15
Liberal Arts and Sciences, General Studies and Humanities	0	2	2
Marketing Operations/Marketing and Distribution	1	3	4
Mechanics and Repairers	14	0	14
Parks, Recreation, Leisure, and Fitness Studies	5	7	12
Personal and Miscellaneous Services	0	2	2
Precision Production Trades	8	6	14
Protective Services	105	30	135
Public Administration and Services	2	3	5
Visual and Performing Arts	9	10	19
Vocational Home Economics	9	38	47
Total Certificate < 1 Year Degrees	318	479	797
Certificate > 1 Year			
Business Management and Administrative Services	19	158	[illegible]
Computer and Information Sciences	126	48	174
Engineering-Related Technologies	1	0	1
Health Professions and Related Sciences	4	54	58
Library Science	2	5	7
Mechanics and Repairers	1	0	1
Precision Production Trades	0	1	1
Visual and Performing Arts	20	17	37
Total Certificate > 1 Year Degrees	173	283	456

Appendix 4 (Continued)
Degrees and Certificates by Level, Discipline and Gender of Recipient
1999-00

Discipline	Men	Women	Total
Associate's			
Agricultural Business and Production	10	9	19
Agricultural Sciences	4	3	7
Biological Sciences/Life Sciences	5	1	6
Business Management and Administrative Services	332	654	986
Communications	6	11	17
Communications Technologies	17	10	27
Computer and Information Sciences	29	25	54
Education	5	25	30
Engineering	28	3	31
Engineering-Related Technologies	223	44	267
Health Professions and Related Sciences	95	634	729
Law and Legal Studies	8	69	77
Liberal Arts and Sciences, General Studies and Humanities	566	886	1,452
Marketing Operations/Marketing and Distribution	26	46	72
Mechanics and Repairers	9	0	9
Parks, Recreation, Leisure, and Fitness Studies	16	1	17
Personal and Miscellaneous Services	17	16	33
Physical Sciences	5	5	10
Precision Production Trades	10	6	16
Protective Services	130	83	213
Public Administration and Services	6	16	22
Science Technologies	20	5	25
Social Sciences and History	1	6	7
Transportation and Materials Moving Workers	1	0	1
Visual and Performing Arts	35	62	97
Vocational Home Economics	16	145	161
Total Associate's Degrees	1,620	2,765	4,385

Appendix 4 (Continued)
Degrees and Certificates by Level, Discipline and Gender of Recipient
1999-00

Discipline	Men	Women	Total
Bachelor's			
Agricultural Business and Production	3	5	8
Agricultural Sciences	28	28	56
Architecture and Related Programs	38	29	67
Area, Ethnic, and Cultural Studies	91	172	263
Biological Sciences/Life Sciences	298	429	727
Business Management and Administrative Services	1,178	1,068	2,246
Communications	298	454	752
Computer and Information Sciences	168	58	226
Conservation and Renewable Natural Resources	45	20	65
Education	180	342	522
Engineering	355	70	425
Engineering-Related Technologies	149	24	173
English Language and Literature/Letters	281	513	794
Foreign Languages and Literatures	68	152	220
Health Professions and Related Sciences	177	741	918
Home Economics, General	24	210	234
Law and Legal Studies	4	24	28
Liberal Arts and Sciences, General Studies and Humanities	356	511	867
Library Science	1	1	2
Marketing Operations/Marketing and Distribution	68	75	143
Mathematics	102	92	194
Multi/Interdisciplinary Studies	128	123	251
Parks, Recreation, Leisure, and Fitness Studies	23	31	54
Philosophy and Religion	86	65	151
Physical Sciences	140	106	246
Protective Services	159	91	250
Psychology	268	971	1,239
Public Administration and Services	26	171	197
Social Sciences and History	1,241	1,157	2,398
Theological Studies and Religious Vocations	2	0	2
Transportation and Materials Moving Workers	6	1	7
Visual and Performing Arts	363	462	825
Total Bachelor's Degrees	6,354	8,196	14,550

Appendix 4 (Continued)
Degrees and Certificates by Level, Discipline and Gender of Recipient
1999-00

Discipline	Men	Women	Total
Master's			
Agricultural Business and Production	3	1	4
Agricultural Sciences	4	3	7
Architecture and Related Programs	40	14	54
Area, Ethnic, and Cultural Studies	19	24	43
Biological Sciences/Life Sciences	105	96	201
Business Management and Administrative Services	1,237	815	2,052
Communications	8	9	17
Computer and Information Sciences	161	83	244
Conservation and Renewable Natural Resources	43	65	108
Education	560	1,941	2,501
Engineering	170	54	224
Engineering-Related Technologies	6	2	8
English Language and Literature/Letters	28	38	66
Foreign Languages and Literatures	18	30	48
Health Professions and Related Sciences	146	577	723
Home Economics, General	25	84	109
Law and Legal Studies	19	20	39
Liberal Arts and Sciences, General Studies and Humanities	4	0	4
Library Science	15	62	77
Mathematics	43	33	76
Multi/Interdisciplinary Studies	7	3	10
Parks, Recreation, Leisure, and Fitness Studies	1	6	7
Philosophy and Religion	24	11	35
Physical Sciences	54	38	92
Protective Services	25	56	81
Psychology	57	198	255
Public Administration and Services	56	186	242
Social Sciences and History	154	122	276
Theological Studies and Religious Vocations	42	19	61
Visual and Performing Arts	146	141	287
Total Master's Degrees	3,220	4,731	7,951

Appendix 4 (Continued)
Degrees and Certificates by Level, Discipline and Gender of Recipient
1999-00

Discipline	Men	Women	Total
Doctoral			
Agricultural Sciences	3	1	4
Area, Ethnic, and Cultural Studies	2	5	7
Biological Sciences/Life Sciences	59	57	116
Business Management and Administrative Services	6	5	11
Computer and Information Sciences	3	0	3
Conservation and Renewable Natural Resources	4	9	13
Education	18	43	61
Engineering	41	7	48
English Language and Literature/Letters	10	11	21
Foreign Languages and Literatures	14	20	34
Health Professions and Related Sciences	13	24	37
Home Economics, General	0	5	5
Law and Legal Studies	1	0	1
Liberal Arts and Sciences, General Studies and Humanities	0	1	1
Mathematics	17	6	23
Multi/Interdisciplinary Studies	1	0	1
Philosophy and Religion	10	8	18
Physical Sciences	38	23	61
Psychology	25	42	67
Social Sciences and History	62	33	95
Theological Studies and Religious Vocations	3	5	8
Visual and Performing Arts	17	15	32
Total Doctoral Degrees	347	320	667
First-Professional			
Health Professions and Related Sciences	142	138	280
Law and Legal Studies	332	280	612
Theological Studies and Religious Vocations	35	24	59
Total First-Professional Degrees	509	442	951